

General

Title

Appropriate testing for children with pharyngitis: percentage of children 2 to 18 years of age who were diagnosed with pharyngitis, dispensed an antibiotic medication, and received a group A streptococcus (strep) test for the episode.

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2015 technical specifications for ACO measurement. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of children 2 to 18 years of age who were diagnosed with pharyngitis, dispensed an antibiotic medication and received a group A streptococcus (strep) test for the episode.

Note from the National Quality Measures Clearinghouse (NQMC): For this measure, there are both Electronic and Hybrid Specifications. This NQMC measure summary is based on the Electronic specification. Refer to the original measure documentation for details pertaining to the Hybrid specification.

Rationale

Pharyngitis is the only condition among upper respiratory infections (URIs) where diagnosis is validated easily and objectively through administrative and laboratory data, and it can serve as an important indicator of appropriate antibiotic use among all respiratory tract infections. Overuse of antibiotics has been directly linked to the prevalence of antibiotic resistance; promoting judicious use of antibiotics is

important to reducing levels of antibiotic resistance (Gonzales et al., 2001). Pediatric clinical practice guidelines (Schwartz et al., 1998) recommend that only children diagnosed with group A streptococcus (strep) pharyngitis, based on appropriate lab tests, be treated with antibiotics. A strep test (rapid assay or throat culture) is the definitive test of group A strep pharyngitis. Excess use of antibiotics is highly prevalent for pharyngitis: about 35 percent of the total 9 million antibiotics prescribed for pharyngitis in 1998 were estimated to be in excess (Seppala et al., 1997).

Evidence for Rationale

Gonzales R, Malone DC, Maselli JH, Sande MA. Excessive antibiotic use for acute respiratory infections in the United States. Clin Infect Dis. 2001 Sep 15;33(6):757-62. [PubMed](#)

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

Schwartz B, Marcy SM, Phillips WR, et al. Pharyngitis-principles of judicious use of antimicrobial agents. J Pediatr. 1998;101:171-4.

Seppala H, Klaukka T, Vuopio-Varkila J, Muotiala A, Helenius H, Lager K, Huovinen P. The effect of changes in the consumption of macrolide antibiotics on erythromycin resistance in group A streptococci in Finland. Finnish Study Group for Antimicrobial Resistance. N Engl J Med. 1997 Aug 14;337(7):441-6. [PubMed](#)

Primary Health Components

Pharyngitis; antibiotics; group A streptococcus (strep) test; children

Denominator Description

Children age 2 years as of July 1 of the year prior to the measurement year to 18 years of age as of June 30 of the measurement year, with a 30-day Negative Medication History, who had an outpatient or emergency department (ED) visit during the Intake Period with only a diagnosis of pharyngitis and who were dispensed or prescribed an antibiotic medication on or three days after the Episode Date (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

A group A streptococcus (strep) test in the seven-day period from three days prior to the Index Episode Start Date (IESD) through three days after the IESD (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA) Committee on Performance Measurement and Board of Directors. Once NCQA establishes national benchmarks for accountable care organization (ACO) performance, all measures will undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis. Where applicable, measures also are assessed for construct validity using the Pearson correlation test.

Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Apr 8. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Accountable Care Organizations

Ambulatory/Office-based Care

Emergency Department

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Multisite Health Care or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Specified

Target Population Age

Age 2 to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

A 12-month window that begins on July 1 of the year prior to the measurement year and ends on June 30 of the measurement year

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Children age 2 years as of July 1 of the year prior to the measurement year to 18 years of age as of June 30 of the measurement year, with a 30-day Negative Medication History, who had an outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an emergency department (ED) visit (ED Value Set) during the Intake Period with only a diagnosis of pharyngitis (Pharyngitis Value Set) and who were dispensed or prescribed an antibiotic medication on or three days after the Episode Date

Note:

Intake Period: A 12-month window that begins on July 1 of the year prior to the measurement year and ends on June 30 of the measurement year. The Intake Period captures eligible episodes of treatment.

Negative Medication History: A period of 30 days prior to the Episode Date when the patient had no antibiotic treatment (refer to Table ACWP-C in the original measure documentation for a list of antibiotic medications). The 30-day look-back period for medication data includes the 30 days prior to the Intake Period.

Pharmacy Data: No prescriptions filled more than 30 days prior to the Episode Date that are active on the Episode Date. A prescription is considered active if the "days supply" indicated on the date when the patient filled the prescription is the number of days or more between that date and the relevant service date.

Prescription Data: No prescriptions more than 30 days prior to the Episode Date that are active on the Episode Date. A prescription is considered active if the total "days supply" including refills is the number of days or more between the prescription date and the relevant service date.

Episode Date: The date of service for any outpatient or ED visit during the Intake Period with only a diagnosis of pharyngitis.

Refer to the original measure documentation for steps to identify the eligible population.

Exclusions

Exclude claims/encounters with more than one diagnosis.

Exclude ED visits that result in an inpatient admission.

Exclude Episode Dates not linked to antibiotic medication on or three days after the Episode Date.

Test for Negative Medication History. Exclude Episode Dates with evidence of antibiotic treatment (refer to Table ACWP-C in the original measure documentation for a list of antibiotic medications) 30 days prior to the Episode Date.

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#) to purchase *HEDIS 2015 Technical Specifications for ACO Measurement*, which includes the Value Set Directory.

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

A group A streptococcus test (Group A Strep Tests Value Set) in the seven-day period from three days prior to the Index Episode Start Date (IESD) through three days after the IESD

Note: *IESD*: The earliest Episode Date during the Intake Period that meets all of the following criteria:

Linked to a dispensed or prescribed antibiotic on or during the three days after the Episode Date.

A 30-day Negative Medication History prior to the Episode Date.

The patient was continuously enrolled during the 30 days prior to the Episode Date through 3 days after the Episode Date.

Exclusions

Unspecified

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#) to purchase *HEDIS 2015 Technical Specifications for ACO Measurement*, which includes the Value Set Directory.

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Electronic health/medical record

Paper medical record

Pharmacy data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

The Accountable Care Organization (ACO) aggregate population is reported as a whole, with an option to report Medicaid separately for measures for which HEDIS Health Plan Measurement offers Medicaid specifications.

Standard of Comparison

not defined yet

Identifying Information

Original Title

Appropriate testing for children with pharyngitis (ACWP).

Measure Collection Name

HEDIS 2015: Accountable Care Organization (ACO) Collection

Measure Set Name

Effectiveness of Care

Measure Subset Name

Respiratory Conditions

Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

Adaptation

This measure was adapted from the *HEDIS Technical Specifications for Health Plans ("HEDIS Health Plan Measurement")* and *HEDIS Physician Measurement*.

Date of Most Current Version in NQMC

2014 Nov

Measure Maintenance

Annual

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2013 Technical Specifications for ACO Measurement. Washington (DC): National Committee for Quality Assurance (NCQA); 2012. various p.

The measure developer reaffirmed the currency of this measure in November 2015.

Measure Availability

Source available for purchase from the [National Committee for Quality Measurement \(NCQA\) Web site](#)

For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone:

NQMC Status

This NQMC summary was completed by ECRI Institute on May 13, 2014.

This NQMC summary was updated by ECRI Institute on February 11, 2015.

The information was reaffirmed by the measure developer on November 2, 2015.

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Production

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2015 technical specifications for ACO measurement. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

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